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REDISCOVERY OF ANNAPHILA CASTA HY. EDW. IN CALIFORNIA (NOCTUIDAE)

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AFTER THE PREPARATION of the manuscript dealing with a reevaluation of Annaphila casta (Buckett, 1965), more specimens have become available for study. In addition to the two California specimens cited by Rindge and Smith (1952), there are now a number more California specimens available. In the author's and Mr. Bauer's joint private collection, there are 3 males and 12 females that were collected in central California; all the specimens are in good to excellent condition.

During the autumn of 1964, Mr. Noel LaDue of Sacramento brought some diurnal moths to Mr. Bauer, and eventually to me also, for determination. Much to our astonishment, some of the moths were the very scarce, and long sought A. casta. The specimens were collected earlier the same year on 10 May, near Plantation, Sonoma County, California. During the following spring of 1965, Mr. Bauer, Mr. M. R. Gardner and I made several attempts to collect A. casta near Plantation, but failed on our earlier attempts. It was not until the exact date of 10 May, 1965 that Mr. Bauer, Mr. LaDue, and I succeeded in collecting specimens of A. casta. Subsequent collecting expeditions were made, one on the 12th of May and another a week later; however, no specimens of A. casta were taken, or even seen.

It seems rather odd that the species is apparently so restricted in its period of flight! Yet the same trend was observed in the spring of 1966. It was very difficult to determine just where the specimens were coming from, and therefore it was equally difficult to locate a probable larval host plant. The specimens collected on 10 May 1965 were observed floating from the skies between the upper canopies of the redwoods (Sequoia sempervirens Endl.), to alight in a meadow during the morning rays of the sun.

Their actions were typical of species within the genus, especially the slow waving up and down of the wings while the specimen was alighted. There was apparently no particular preferred

alighting spot, as specimens were taken from the ground, grass, and low growing young redwoods. During the spring of 1965, little attempt was made to determine the larval host plant(s) of casta. During 1966, however, Mr. and Mrs. Chris Henne were in the vicinity of Plantation, and ardent attempts were made to determine a larval host plant relationship, but with no positive results. To date there is apparently no knowledge as to the larval host plant(s) of A. casta.

While collecting A. casta during 1965, it was noticed that the moth occurred only in one very limited area. Other adjacent areas with virtually the same environment as this one particular meadow yielded absolutely nothing, nor were any specimens of casta even seen. As yet, there is no explanation for this acute endemicity, although it is believed with additional biological information gained in relation to casta, a logical hypothesis might result.

Buckett (op. cit.) discussed various possibilities for the correct type locality of A. casta. It was (and still is) believed that the type locality of the species is in Oregon, not in California (for evidence to support this idea, refer to the aforementioned paper). One fact that is supported by the recent collections of casta is the probable validity of the labels on the two specimens contained in the American Museum of Natural History in New York City. These two specimens are labeled: "Sonoma Co. May Cal." and "Sonoma Co. May Calif.," and because they are each labeled differently there is the suggestion that the specimens were probably collected during different years. Judging from the evidence available in the literature, the Oregon type locality, in all probability is the correct one.

It is hoped that in the future more work will be done in attempting to solve the life history of A. casta. Also, it would be of academic interest to determine whether or not casta has a continuous vs. discontinuous distribution between its known localities (namely Sonoma and Mendocino Counties, California, and Benton and Douglas Counties, Oregon). I would like to extend my appreciation to those individuals that took part in this project: Mr. Bill Bauer; Mr. Mike Gardner; Mr. and Mrs. Chris Henne: Mr. Noel LaDue.

LITERATURE CITED

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